

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application.

#### **Listing of Claims**

Claim 1 (Currently Amended): A method of decreasing the level of tissue plasminogen activator (t-PA) antigen in a human subject, the method comprising:

providing a sample from the subject, wherein said sample comprises a nucleic acid ~~or protein~~ from the subject,

detecting at least one 4G allele at a plasminogen activator inhibitor-1 (PAI-1) gene promoter site in the sample, and

engaging the human subject in exercise training for a period of time sufficient to decrease the level of t-PA antigen,

wherein the subject has a 4G/5G genotype.

Claim 2 (Cancelled).

Claim 3 (Cancelled).

Claim 4 (Original): The method of claim 1, wherein the exercise training comprises extensive exercise.

Claim 5 (Original): The method of claim 1, wherein the exercise training comprises moderate exercise.

Claim 6 (Original): The method of claim 1, wherein the exercise training comprises limited exercise.

Claim 7 (Currently Amended) A method of preventing cardiovascular disease in a human subject, the method comprising:

providing a sample from the subject, the sample comprising a nucleic acid ~~or protein~~ from the human subject,

detecting at least one 4G allele at a plasminogen activator inhibitor-1 (PAI-1) gene promoter site in the sample, and  
engaging the subject in exercise training for a period of time sufficient to decrease the level of tissue plasminogen activator (t-PA) antigen,  
wherein the subject has a 4G/5G genotype.

Claim 8 (Cancelled).

Claim 9 (Cancelled).

Claim 10 (Previously Presented): The method of claim 7, wherein the exercise training comprises extensive exercise.

Claim 11 (Previously Presented): The method of claim 7, wherein the exercise training comprises moderate exercise.

Claim 12 (Previously Presented): The method of claim 7, wherein the exercise training comprises limited exercise.

Claim 13 (Currently Amended): A method of ameliorating cardiovascular disease in a human subject suffering from cardiovascular disease, the method comprising:  
providing a sample containing a nucleic acid ~~or protein~~ from the human subject,  
detecting at least one 4G allele at a plasminogen activator inhibitor-1 (PAI-1) gene promoter site in the sample, and  
engaging the subject in exercise training for a period of time sufficient to decrease the level of tissue plasminogen activator (t-PA) antigen,  
wherein the subject has a 4G/5G genotype.

Claim 14 (Cancelled).

Claim 15 (Cancelled).

Claim 16 (Previously Presented): The method of claim 13, wherein the exercise training comprises extensive exercise.

Claim 17 (Previously Presented): The method of claim 13, wherein the exercise training comprises moderate exercise.

Claim 18 (Previously Presented): The method of claim 13, wherein the exercise training comprises limited exercise.

Claims 19 and 20 (Cancelled).

Claim 21 (Withdrawn): A method of increasing fibrinolysis levels in a subject, the method comprising:

identifying a subject with at least one I allele and/or genotype at the (t-PA) gene locus; and

engaging the subject in exercise training for a period of time sufficient to increase fibrinolysis in the subject.

Claim 22 (Withdrawn): The method of claim 21, wherein the subject has a I/I genotype.

Claim 23 (Withdrawn): The method of claim 21 wherein the subject has a I/D genotype.

Claim 24 (Withdrawn): The method of claim 21, wherein the exercise training comprises extensive exercise.

Claim 25 (Withdrawn): The method of claim 21, wherein the exercise

training comprises moderate exercise.

Claim 26 (Withdrawn): The method of claim 19, wherein the exercise training comprises limited exercise.

Claim 27 (Withdrawn): A method of preventing or ameliorating cardiovascular disease in a subject, the method comprising:

identifying a subject with at least one I allele and/or genotype at the (t-PA) gene locus; and

engaging the subject in exercise training for a period of time sufficient to prevent cardiovascular disease in the subject.

Claim 28 (Cancelled).

Claim 29 (Cancelled).